which contains enough silicon in order to admit of being decarburised in an acid-lined Bessemer converter, not to become too cold thereby, whilst on the other hand, the phosphorus content is so high that treatment in a basic hearth must follow and is nevertheless too low in order to permit of treatment in a basic Bessemer converter. Metal taken from the blast furnace is desiliconised and decarburised down to about •! per cent, in the acid converter, whereon it is transferred to the open-hearth furnace and there dephosphorised by means of ore additions, and simultaneously decarburisation proceeds to finality. The demands on the open-hearth furnace are considerably reduced thereby, the time of treatment is short, and the furnaces attain quite double the production which they could turn out by the ordinary pig and scrap process with cold charges. The process requires, however, a complete Bessemer plant, which is costly to build and'work, on which ground it has found few imitators.

L. Pszezolka sought to remedy these defects by means of employing the transport ladle (which conveyed the molten pig iron from the blast furnace to the open-hearth furnace) for the pre-blowing. He saved the requisite blowing engines by means of taking the blast from the blast conduits of the blast furnaces. In order to be able to ^utilise this blast for pre-blowing in spite of the low pressure, he did not admit it, as occurs in the Bessemer converter, by passing it upwards through the iron, but it acted on the upper surface of the same. Since, moreover, the manufacturing costs in -the open-hearth furnace are smaller if the silicon content of the pig iron is low, but one cannot well employ cold blast with a pig iron with less than 1 per cent. Si, so Pszczolka-Daelen employed the blast from the hot blast conduits by means of the available heat of which, as well as the heat developed from the combustion of the CO developed in the iron, the deficiency of silicon in the iron would be compensated for. The process is nevertheless fettered apparently by many difficulties; at all events it has not been capable of adoption. It shares equally with the Witkowitz process the disadvantage that the reducing agents in the iron are completely lost, and that a not inconsiderable loss of metallic iron takes place in addition.